Paper No. 23

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte ISABELLE BOEYE

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Appeal No. 2000-1653
Application No. 08/906,586

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ON BRIEF

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Before COHEN, STAAB, and McQUADE, *Administrative Patent Judges.*

STAAB, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on an appeal from the final rejection of claims 1-8, all the claims currently pending in the application.[1]

[1]Two amendments subsequent to the final rejection have been submitted. The first (Paper No. 10), filed August 30, 1999, sought to cancel non-elected claims 9-24. The second (Paper No. 15), filed November 11, 1999, sought to amend claim 1 by adding the word “uniformly” in line 5 thereof. Both

The claims on appeal are drawn to an in-line mixing apparatus for the substantially continuous preparation of liquid mixtures, and are reproduced in the appendix to appellant's brief.

The references applied in the final rejection are:

Johnston	5,165,440	Nov. 24, 1992
Arvidson et al. (Arvidson)	5,494,112	Feb. 27, 1996

Claims 1-8 stand rejected under 35 U.S.C. § 103 as being unpatentable over Johnston in view of Arvidson.

The Examiner's Position

With respect to claim 1, the sole independent claim on appeal, the examiner considers that Johnston discloses the claimed invention generally as claimed, including a first tubular chamber 2 and a second tubular chamber 18, except for a flow regulator comprising an adjustable output pump and flow meter for regulating the amount of component material introduced in the first chamber via inlet 14. The examiner takes the position, however, that it would have been obvious to provide an adjustable output pump and flow meter in

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amendments have been entered. See Paper Nos. 11 and 16.

Johnston upstream of inlet 14 in view of Arvidson's showing of flow meters 64 and 124 and pumps 62 and 118.

Among the limitations of claim 1 argued by appellant as patentably distinguishing over the combined teachings of Johnston and Arvidson is the requirement of claim 1 for "means within said first chamber for uniformly mixing materials introduced therein with a carrier fluid flowing therethrough." The examiner's views with respect to this limitation are found on pages 3-4 of the answer and read as follows:

> Applicant's argument is that Johnston does not contain uniform mixing means in the first stage. However, a review of applicant's specification (page 5, lines 14-16) shows that applicant's first stage device does not provide perfectly uniform mixing either. The second stage is used "to increase mixing of the components in the first stage". It could technically be argued that depending on how strictly the word "uniformly" is defined that the amendment after-final (which merely added the word "uniformly") should not have been entered because it does not describe applicant's device. However, a view that "uniformly" means mostly, substantially, or desirably uniform rather than <u>absolutely perfectly</u> uniform was the view taken by the examiner in deciding to enter the amendment. In the same manner that applicant's device uses a second stage to improve mixing, Johnston uses a second stage to improve the mixing of the first stage (column 4, lines 16-28). Therefore, it should be clear that "uniformly" cannot reasonably be applied to applicant's device any more than to Johnston.

Discussion

In proceedings before it, the PTO will give words in a claim their ordinary and accustomed meaning absent an intent in the specification to use them in a more limited or different sense. *See In re Barr*, 444 F.2d 588, 597, 170 USPQ 330, 339 (CCPA 1971); *Envirotech Corp. v. Al George, Inc.*, 730 F.2d 753, 759, 221 USPQ 473, 477 (Fed. Cir. 1984), and *Nike, Inc. v. Wolverine World Wide,* 43 F.3d 644, 646-47, 33 USPQ2d 1038, 1039-40 (Fed. Cir. 1994). Here, it appears that the only appearance of the word "uniformly" in this case is in claim 1 in the limitation "means within said first chamber for *uniformly* mixing materials introduced therein with a carrier fluid flowing therethrough" (emphasis added), the word "uniformly" having been introduced into the claim upon entry of the second amendment (Paper No. 15) subsequent to the final rejection. Under these circumstances, we presume that the meaning of the adverb "uniformly" corresponds to the ordinary and accustomed definition of the adjective "uniform," e.g., "**1.a.** Always the same: UNVARYING . . . **b.** Being without

variation or fluctuation: CONSISTENT."[2]

With reference to Figure 1 of Johnston, element 2, which is the element the examiner equates to the claimed "first tubular chamber," comprises a polymer filament or thread producing apparatus having an inner pipe 4 perforated with a number of holes 6 and wrapped with a very fine wire mesh, and an outer pipe 12 covering the perforated pipe to provide an annulus therebetween (column 3, lines 38-45). An inlet 8 is provided at the end of the apparatus for the introduction of solvent and an inlet 14 is provided in the sidewall of the outer pipe for the introduction of viscous polymer (column 3, lines 45-47). Johnston's process is carried out by introducing the solvent through inlet 8 into the inner pipe 4. At the same time, a high molecular weight polymer is pumped into the annulus between pipes 12 and 4 through inlet 14. The polymer pumped into the annulus is forced by high pressure differential through the fine mesh in openings of the perforated inner pipe and into the flowing stream of solvent (column 3, line 62, through column 4, line 6). Johnston

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[2]*Webster's II New Riverside University Dictionary*, copyright © 1984 by Houghton Mifflin Co.

describes the results as follows:

> The polymer forced through the mesh forms fine filaments or threads which are also pulled by the flowing solvent. Because of the number of perforations and size of the mesh, thousands of fine threads of polymer enter the flowing solvent. The solvent passes through inner pipe **42** at a sufficient flow rate that the threads of polymer are wrapped around each other or woven so that the mixture of polymer and solvent leaving apparatus **40** is a woven matrix of fine polymer threads in the solvent.
>
> *In the first stage of the process as described, there may not be totally efficient formation of fine polymer threads. Thus, a small portion of the polymer may not form a thread as it passes through the fine wire mesh, either because it is not sufficiently wetted by the solvent or is not pulled by the solvent flow or because of other problems in the flow mechanism. These portions of polymer which do not thread will form small sized balls of polymer*. The second stage of the process which is carried out in the shear strain

> apparatus [18] provides a means to help pull or elongate these balls of polymer to reduce their number and to also help continue the mixing of the polymer threads and the solvent. [Col. 4, lines 6-28, emphasis added.]

In that Johnston's first stage apparatus 2 may not be totally efficient in forming fine threads of polymer, such that polymer in the form of small balls also may be present in the flow of fine threads and solvent that exits the first stage apparatus, the examiner's determination that Johnston's first stage apparatus 2 includes means that correspond to the claimed means for "uniformly mixing" material is not well taken, especially when the word "uniformly" is given its ordinary and accustomed meaning, as must be done here in the absence of any indication in appellant's specification that the term "uniformly" is being used in a more limited or different sense. Simply put, there is no evidence to support the examiner's contention that Johnston's first stage apparatus includes means which meet this claim limitation. Hence, even if the Johnston apparatus is modified in the manner proposed by the examiner, the claimed subject matter would not result. Accordingly, the examiner's § 103 rejection of the claim 1 is not well taken.

In light of the foregoing, the standing § 103 rejection of claim 1, as well as claims 2-8 that depend therefrom, cannot be sustained.

Remand to the Examiner

Pursuant to 37 CFR § 1.196(a), this case is remanded to the examiner for consideration of the following matters.

A review of appellant's disclosure indicates that carrier fluid and size components are "combined" and "mixed together" within the first mixing stage device 20 to ensure "good mixing" (page 5, lines 1-10). The second stage hydrolyzer 40 may additionally be provided with conventional mixing elements "to increase mixing" of the components "blended" in the first stage (page 5, lines 11-16). A second mixing device, or third stage, 60 may also be provided downstream of the second stage hydrolyzer "to provide additional blending" of the components (page 5, 20-23). Additional descriptions of the "mixing" and "blending" functions of the first, second, and third stages are found on pages 6-9 of the specification.

The test for determining compliance with the written description requirement found in the first paragraph of 35 U.S.C. § 112, first paragraph, is whether the disclosure of

the application as originally filed reasonably conveys to the artisan that the inventor had possession at that time of the later claimed subject matter, rather than the presence or absence of literal support in the specification for the claim language. *In re Kaslow*, 707 F.2d 1366, 1375, 217 USPQ 1089, 1096 (Fed. Cir. 1983). Claim limitations which are urged to be inherent in the disclosure must be shown as having clear support from the necessary and only reasonable construction to be given the disclosure by one skilled in the art. *Kennecott Corp. v. Kyocera Int'l, Inc.*, 835 F.2d 1419, 1423, 5 USPQ2d 1194, 1198 (Fed. Cir. 1987), *cert. denied*, 486 U.S. 1008 (1988).

This case is remanded to the examiner for consideration of whether appellant's original disclosure provides descriptive support within the meaning of the first paragraph of 35 U.S.C.
§ 112 for the requirement of claim 1, added by amendment, that the first stage chamber has means within it for *uniformly* mixing materials introduced therein with a carrier fluid flowing therethrough.

Summary

The rejection of claims 1-8 under 35 U.S.C. § 103 as being unpatentable over Johnston in view of Arvidson is reversed.

Pursuant to 37 CFR § 1.196(a), this case is remanded to the examiner for consideration of the matter noted above.

The decision of the examiner is reversed.

This application, by virtue of its "special" status requires immediate action. *See Manual of Patent Examining Procedure* (*MPEP*) § 708.01 (7th Ed., Rev. 1, Feb. 2000). It is important that the Board be informed promptly of any action affecting the appeal in this case.

REVERSED and REMANDED

IRWIN CHARLES COHEN Administrative Patent Judge	)	
LAWRENCE J. STAAB Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES

JOHN P. McQUADE)
Administrative Patent Judge)

LJS:hh

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